# AIR CONDITIONING

Repairs, Maintenance and Alternatives

Air conditioning repairs are mostly seasonal. Usually, this type of device tends to break down in the hot months, when we use it the most, and it is that for a large part of the year it usually remains off, a fact that makes maintenance of the air conditioning essential and a thorough check when we are going to turn it on again.

# **Air Conditioning Repair Services**

Air conditioning repairs and maintenance are easier than those carried out on other household appliances. In fact, some of the repairs can be done at home, such as changing the filter. Other repairs to air conditioning equipment require a technician specialized in this refrigeration system since electrical problems or breakdowns may arise that require more complex solutions. Air conditioning repairs are very common. The most common causes that can cause failures in the installation are continuous misuse or long months of inactivity. This can condition the proper functioning of the air conditioning.

Contacting a specialized repair service is the best way to ensure a long-term repair. Air conditioning works through a very particular and specific system, to repair it correctly and effectively it is necessary to know the operation of the indoor unit, the thermostat, the process followed by the refrigerant gases and the outdoor unit. Only a specialized repair company is capable of making an adequate repair that extends the useful life of the appliance.

# **Alternatives To Air Conditioning**

Although air conditioning is the most effective appliance when it comes to cooling the home or any room, it is not the only one at our disposal.

There are different alternatives to manage to control the temperature of our homes and be able to withstand the high temperatures, so typical of summer.

#### Air Conditioners

Air conditioners, also called fan heaters, serve both to heat a room and to cool it. These appliances usually have temperature regulators, in addition to incorporating antifreeze systems and designed to prevent possible overheating.

**Pros:** They are comfortable since they are usually small and easy to transport.

Cons: They are appliances with low power and high consumption, as well as being noisy.

# Portable Evaporative Cooler

This type of appliance is similar to a fan, with the difference that it has compartments for cold accumulators, similar to those used in refrigerators to keep food cold. Through a water pump, the evaporative cooler distributes the cold evenly throughout the appliance. Then, the refrigeration system is responsible for spreading the coolness to the outside, thus refreshing the room.

**Pros:** Ideal for allergy sufferers since most of these air conditioners have an ionizing function, improving air quality.

Cons: They are usually noisy. Although they help to cool the environment, they do not cool.

#### **Heat Pump**

Although it is somewhat more expensive, the heat pump offers an obvious advantage over other alternatives: it is used as heating in winter, as well as air conditioning in summer. Its cost and installation are similar to those of traditional air conditioners.

**Pros:** offers an alternative for winter and summer.

Cons: Higher acquisition cost.

#### Fans

Traditional fans have been our allies for decades. Cheap, easy to acquire, of different sizes and variables, they are our versatile allies for the summer. Although they are not as effective and cool as air conditioning, they usually help move the air in the home, generate current and facilitate the passage of hot air, cooling it. There is a wide variety of fans, of all prices and sizes, to adapt them to each room in your home and each situation:

- •Ceiling and Wall Fans: they are an economical option and capable of cooling a room quickly and without large electricity consumption. Ideal for small homes and easy to install.
- •Standing Fans: its operation is basic and it is the most popular in homes. They are made up of blades that move hot air and cool any room from a height of more than 90 centimeters. Ideal for apartments and cheap.
- •Fans with Nebulizer: Standing fans are greatly improved with this particular feature: the nebulizer. With this, the freshness of the environment is perceived beforehand and they are easily regulated. They are usually an equally economical option and ideal for homes where air circulation is scarcer.
- •Tower Fans: These fans do not require installation and are an alternative to traditional bladed fans. They are smaller, cool the environment quite well and have an affordable price.

# **Other Options**

- •Adapt the home to high temperatures: thick, high walls that facilitate insulation, white facades. This type of construction helps to control temperatures both in winter and summer. In addition to this, the installation of blinds and canvas to protect the different rooms of the house from the sun, helps to maintain a pleasant temperature in summer.
- •Solar panels for air conditioning: don't you want to spend more on your electricity bill? The use of solar panels to power the air conditioning that we have installed in our home can be an ecological and cheaper option to use these appliances.
- •Hydrothermal floor: It does tend to help a lot to maintain a good temperature inside the home; both hot and cold. For this, it is necessary to install pipes under the floor of the house where the water can circulate, refreshing the environment, at the same time that **renewable energies** are used to reduce energy consumption.
- •Cool off naturally: it is no secret that small gestures help to tolerate high temperatures, but if we want cheaper alternatives such as fans or air conditioners to have a greater effect, it is important that we take other additional measures when the heat hits. Regularly washing our faces, applying cool cloths to the neck, arms, neck, chest, hydrating ourselves well and staying in the shade are always effective gestures to control the sudden rise in temperature.

# How do we detect the failure of an Air Conditioner?

An air conditioner shows us several symptoms to indicate that there is a fault in its system. Next, we are going to analyze the signs that indicate that there is a problem in our air conditioning, the most effective fixes and some tips for its maintenance.

#### **Common Air Conditioner Faults**

Air conditioning repairs usually have their origin in the following breakdowns.

#### Filter Wear

The quality of the air that our air conditioning expels depends on the state of the filters. If we keep the filters in good condition, the air we breathe in our house will be of good quality.

A clear effect of the poor condition of the filters are the smells, it may be that the air conditioning gives off a bad smell (or even a burning smell). Another effect is the decrease in the production of cold, and therefore, the device will have to invest more energy to be able to work.

#### How to repair it?

If the filter is not damaged, just remove it from the Split or indoor unit and wash it with water. Once they are dry, you can put them back in place. With the filters free of dirt we will once again enjoy clean air and we will be avoiding more serious breakdowns.

#### Smells

As we saw, a poor condition of the filters can be the cause of bad odors, but there are also other reasons that cause bad odors, such as water accumulated in the battery. This problem usually occurs after months of inactivity, in which the water has remained stagnant, and as stagnant water the smell is unpleasant.

#### How to repair it?

If the water or the drainage system generate bad odors, it is necessary to contact an installation technician since we cannot carry out this repair ourselves. Sometimes it will be necessary to install a siphon so that the water circulates normally.

# **Drop in Cold Productivity**

It is another of the typical signs that indicate that our air conditioning needs repair. Sometimes the air conditioner loses power, and therefore it does not cool at the usual speed, or directly, it does not generate the temperature that we want. If this happens to you regularly, we recommend that you review the filters. But if you think that this is not the problem, perhaps the fault is in the circuit, a small problem can cause you to lose gas or coolant. It may also be that the fault has occurred in the fan motor.

# How to repair it?

In this case, it must be a technician who thoroughly analyzes the state of all the elements of the air conditioning. If you think the problem is in the filters, you can clean them and try the device again. But if the fault is located in some element of the system, it will be essential that you contact a repair company.

#### **Excessive Noise**

Sometimes the air conditioner works normally, but it generates much higher noise than it usually does. This may be due to a lack of gas or oil, since the lack of some of these elements causes noise in the internal part of the air conditioning, or the appearance of some residue in the engine.

#### How to repair it?

Whether it is necessary to change the gas or oil, or if there is dirt in the engine, it will be necessary to have the services of a technical repairer to determine the origin of the noise and repair it immediately.

#### Sensor Problems

Behind the control panel there is a sensor that measures the air temperature. The main reason for failure in this sensor is usually due to the displacement of the part itself.

# How to repair it?

To repair it, it will be essential to reinstall the control sensor correctly. For this, it will be necessary to contact a repair technician.

# It turns itself off and on

Another recurring case, the air conditioner turns off and on without being able to control it and without prior notice. The accumulation of dirt in the evaporator unit or in the fan is usually one of the causes of this failure.

# How to repair it?

As these are internal parts, it will be necessary for a technician capable of performing a deep cleaning without damaging other parts to intervene.

#### It Freezes

One of the main causes of air conditioning freezing is dirt on the filters and on the evaporator coil. Being clogged with dirt, the air does not circulate properly to the outside, thus causing the freezing of the electronic device.

#### How to repair it?

To avoid this problem, which can end the good health of our air conditioning, it is recommended to clean the filters at least once a year. To clean the evaporator coil, it is necessary to handle it by an expert because it is a fundamental part of the appliance.

# Repair the Air Conditioning, when is it advisable to hire a service?

Both for electrical repairs and for any breakdown in the cooling system, it is essential to contact a technical repair team.

In general, it is always advisable to contact a person who knows the use, maintenance and repair of a refrigerator system of this type, so that the air conditioning arrangements are durable and adapted to each model. Each manufacturer uses a common system, but all models have their own characteristics. An experienced technician will be able to identify the problem and carry out a solution adapted to the model and brand.

Any issues not related to filters should be looked at by an expert. On the other hand, the filters are prepared so that the user can handle them safely, and their cleaning is very simple, you must wash them with water to remove the dirt.

Finally, do not forget to check if the device's warranty is valid. If there is a fault during the first weeks or months after the installation of the air conditioner, the manufacturer or installer company should take charge of the repair, since a fault could have occurred in the installation or manufacture of the air conditioner.

# **Air Conditioning Maintenance**

Maintaining the good condition of our air conditioning is essential to save on our electricity bill and avoid trouble with repairs at the most inopportune moments. The first thing to do is read the instructions for your air conditioner carefully, because each brand and model has its particularities, despite the fact that there are standard treatments. A preventive maintenance of breakdowns is a way to extend the useful life of our appliance. Follow these steps to keep your air conditioner on point:

# 1. Clean the filters of the internal or split unit.

Filters are the parts that are responsible for containing dust particles and various allergens, in order to prevent them from contaminating the environment. They are vital for the proper functioning of the air conditioning.

It is recommended to clean them once a year (or two or more times, if it is a heat pump and it is used in winter too) and it is enough to use cold water and let them dry in the shade.

#### 2. Clean the internal and external drive.

In addition to the filters, it is important to clean the rest of the split, especially the part where it drains, since if the water accumulates it could become a source of bacteria and bad odors.

To clean the outdoor unit, you can remove the dust on the device, but for the rest of the maintenance it is preferable that a specialist take care of it, since it is where the refrigerant gas is located and the installation subjected to the external elements that require more dedication and care.

#### 3. Check the air conditioning circuit.

In the event that you come across a refrigerant gas leak or see something strange in your air conditioning circuit, it is important to call the AC technician and let him take care of it. He will know how to fix the situation.